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Abstract

(57)【要約】

【目的】

貼付工程に要する作業時間を削減し、長尺のフィルムであっても確実かつ容易な位置決めを可能として、作業効率を向上させることができる感圧転写式フィルムの貼付工具を提供する。

【構成】

貼付工具 10 は、薄板状の握持部 12 と、握持部 12 のテーパ状縁部 14 に固定される貼付部 16 とを備える。

貼付部 16 は先端に直線状の貼付縁部 18 を備える。

握持部 12 の上方には、棒状部材 22 がテーパ状縁部 14 との間に空隙を介して貼付部 16 に平行に延設される。

また、握持部 12 は、テーパ状縁部 14 に近接して厚さ方向へ貫通する矩形貫通孔 26 を備え、矩形貫通孔 26 内に、摺動ブロック 30 が上下方向へ摺動可能に配置される。

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(57) [Abstract]

[Objective]

work time which is required in sticking step is reduced, withcertainty and easy registration as possible, operating efficiency sticking tool of pressure-sensitive transfer type film which it can improve is offered even with long film .

[Constitution]

Sticking tool 10 握 holding section has tacky part 16 where is locked to taper edge 14 of 12 of thin sheet and 握 holding section 12.

tacky part 16 provides sticking edge 18 of linear for end.

rod member 22 through empty gap between taper edge 14 , it is installedparallel on tacky part 16 in upward direction of 握 holding section 12.

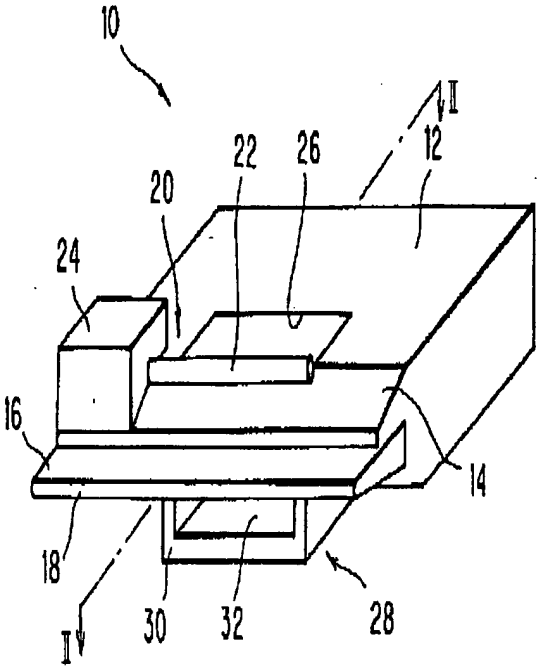
In addition, 握 holding section 12, proximity making taper edge 14, has rectangular hole 26 which it penetrates to thickness direction, inside rectangular hole 26, the rubbing block 30 to up/down direction is arranged in slidable.

摺動ブロック 30 は、下端部に感圧転写式フィルムの先端部を収容する収容凹部 32 を、前面から凹設して備える。

収容凹部 32 は、貼付部 16 の貼付縁部 18 と平行に延びる直立内壁面を後端に備える。

rubbing block 30 has installing storage depression 32 which accommodates tip portion of the pressure-sensitive transfer type film in bottom end, from front surface.

storage depression 32 provides upright inside wall surface which extends parallel with thesticking edge 18 of tacky part 16 for rear end.



Claims

【特許請求の範囲】

【請求項 1】

支持体と、支持体の貼付面に支持される転写画像フィルムと、転写画像フィルムを保護する裏地とを備えた感圧転写式フィルムを、被貼付面に貼付するための貼付工具であって、

握持部と、

前記握持部の縁部に設けられ、感圧転写式フィルムの転写画像フィルムを被貼付面に圧着する直線状の貼付縁部と、

前記貼付縁部に対し、感圧転写式フィルムの相対移動方向上流位置で前記握持部に設けられ、該フィルムの移動に従って裏地を自動的に剥離する裏地剥離手段と、

[Claim(s)]

[Claim 1]

With sticking tool in order to stick pressure-sensitive transfer type film which has the backing which protects transfered image film and transfered image film which are supported in adhesive surface of carrier and carrier, in surface being bonded,

握 holding section and,

Sticking edge of linear which is provided in edge of theaforementioned 握 holding section, transfered image film of pressure-sensitive transfer type film pressure bonding itmakes surface being bonded and,

Vis-a-vis aforementioned sticking edge, backing separation means where with the relative positioning direction upstream position of pressure-sensitive transfer type film it is provided in theaforementioned 握 holding section, follows to movement of the said film and backing peels off in automatic

前記貼付縁部に対し、感圧転写式フィルムの相対移動方向下流位置で前記握持部に設けられ、該フィルムの先端部を固定的に保持するフィルム先端部保持手段と、

and,

Vis-a-vis aforementioned sticking edge, film end retaining means which with the relative positioning direction downstream position of pressure-sensitive transfer type film is provided in aforementioned 握 holding section, keeps tip portion of said film in fixable and,

前記貼付縁部に対して感圧転写式フィルムを直交方向へ相対移動可能とするように、被貼付面に対し該フィルムを位置決めするフィルム位置決め手段、とを具備したことを特徴とする貼付工具。

In order pressure-sensitive transfer type film to make relatively positionable to orthogonal direction vis-a-vis theaforementioned sticking edge, film positioning means、which registration does the said film vis-a-vis surface being bonded was possessed sticking tool。 which is made feature

【請求項2】

[Claim 2]

前記裏地剥離手段は、前記握持部との間に所定の空隙を介して固定配置され、かつ前記貼付縁部に平行に延設される棒状部材を具備する請求項1記載の貼付工具。

Sticking tool。 which is stated in Claim 1 which possesses the rod member where aforementioned backing separation means, through predetermined empty gap between theaforementioned 握 holding sections, is locked is arranged, at sametime is installed parallel on aforementioned sticking edge

【請求項3】

[Claim 3]

前記フィルム先端部保持手段は、前記握持部に貫通形成された貫通孔内に移動可能に配置されるブロック体と、該ブロック体に凹設され、感圧転写式フィルムの先端部を収容する収容凹部と、該収容凹部の開口から離間して配置される前記握持部の前記貫通孔の内壁面とを具備する請求項1又は2記載の貼付工具。

Alienating from opening storage depression and said storage depression where theaforementioned film end retaining means, is installed in block, and said block whichinside hole which it was penetrated was formed to theaforementioned 握 holding section are arranged in movable accommodates tip portion of pressure-sensitive transfer type film, sticking tool。 which itstates in Claim 1 or 2 which possesses inside wall surface of aforementioned hole of aforementioned 握 holding section which is arranged

【請求項4】

[Claim 4]

前記フィルム位置決め手段は、前記ブロック体の前記収容凹部の後端に前記貼付縁部と平行に形成された直立内壁面を具備する請求項3記載の貼付工具。

As for aforementioned film positioning means, sticking tool。 which is stated in Claim 3 which possesses upright inside wall surface which was formed parallelwith aforementioned sticking edge in rear end of theaforementioned storage depression of aforementioned block

Specification

【発明の詳細な説明】

[Description of the Invention]

【0001】

[0001]

【産業上の利用分野】

[Field of Industrial Application]

本発明は、ステッカーやラベル等の感圧転写式フィルムを手作業により被貼付物へ貼付するための貼付工具に関する。

this invention regards sticking tool in order to stick sticker and label or other pressure-sensitive transfer type film to item being bonded with manual operation .

【0002】

[0002]

【従来の技術】

[Prior Art]

例えば自動車の本体外装等に装飾目的で貼付される装飾フィルムや窓枠保護用の保護テープ等の、感圧転写式フィルムは、一般に、透明な

Protective tape or other、 pressure-sensitive transfer type film for decoration film and window frame protection which arestuck to main body outdoor etc of for example automobile

樹脂製フィルムからなる支持体と、支持体の貼付面に支持される文字や模様等の転写画像フィルムと、転写画像フィルムを保護する裏地とからなる。

この種のフィルムを被貼付物に貼付する際に、従来は、いわゆるスキージと呼ばれる貼付工具を使用した手作業による貼付工程が実施されている。

一般にスキージは、柔軟性を有した樹脂成形品からなり、握持部及び直線状の貼付縁部を備えた単純な薄板状工具である。

貼付工程では、まず感圧転写式フィルムの裏地を剥がし、そのフィルムを目視又は目印合わせによって被貼付物上で位置決めした後、支持体の裏面からスキージの貼付縁部をフィルム及び被貼付物に押し付けて、貼付面と被貼付物表面との間の空気を追い出しつつ転写画像フィルムを被貼付物に圧着転写する。

その後、支持体のみを手作業により被貼付物から剥がす。

支持体の貼付面の粘着力は、転写画像フィルムの接着面の粘着力より遥かに小さいので、転写画像フィルムのみが被貼付物表面に残されることになる。

【0003】

【発明が解決しようとする課題】

従来の貼付工具を用いた感圧転写式フィルムの貼付工程は、上記のようにいくつかの独立した段階を含むので、作業に時間がかかり作業効率が劣る。

また、窓枠保護テープのようにフィルムが長尺になると、予め裏地を剥がすことによってフィルムの腰がなくなるので、被貼付物に対する位置決めが困難となる場合がある。

【0004】

本発明は、このような課題を解決するために鋭意、工夫改善を施したものであり、その目的は、感圧転写式フィルムの貼付工程に要する作業時間を削減し、かつ長尺のフィルムであっても確実かつ容易な位置決めを可能として、作業効率を向上させることができる感圧転写式フィルムの貼付工具を提供することにある。

【0005】

with decoration objective generally, consistsof backing which protects character and motif or other transfered image film and transfered image film which are supported in adhesive surface of carrier and carrier whichconsist of transparent resin film.

When sticking film of this kind in item being bonded, sticking step is executed with manual operation which uses sticking tool which untilrecently, is called so-called squeegee.

Generally squeegee consists of resin molding which possesses softening,it is a 握 holding section and a simple thin sheet tool which has sticking edge of linear.

While with sticking step, peeling backing of pressure-sensitive transfer type film first,film with visual or marking adjusting on item being bonded registration after doing, pushing sticking edge of squeegee to film and item being bonded from back surface of carrier, expelling air between the adhesive surface and item being bonded surface pressure bonding it copies transfered image film to item being bonded.

After that, only carrier is peeled from item being bonded due to manual operation .

Because tackiness of adhesive surface of carrier is much smaller than the tackiness of adhering surface of transfered image film, it means that only transfered image film is leftto item being bonded surface.

[0003]

[Problems to be Solved by the Invention]

Because sticking step of pressure-sensitive transfer type film which uses conventional sticking tool, as description above includes step where several becomesindependent, time is required for job and operating efficiency is inferior.

In addition, like window frame protective tape when film becomes lengthwise, backing is peeled beforehand, because body of the film is gone by , there are times when registration for item being bonded becomes difficult.

[0004]

As for this invention, being something which administers diligence、 deviceimprovement in order to solve this kind of problem, as for objective, itreduces work time which is required in sticking step of the pressure-sensitive transfer type film, at same time with certainty and easy registration as possible,operating efficiency it is to offer sticking tool of pressure-sensitive transfer type film which it canimprove even with long film .

[0005]

【課題を解決するための手段】

上記目的を達成するために、本発明は、支持体と、支持体の貼付面に支持される転写画像フィルムと、転写画像フィルムを保護する裏地とを備えた感圧転写式フィルムを、被貼付面に貼付するための貼付工具であって、握持部と、握持部の縁部に設けられ、感圧転写式フィルムの転写画像フィルムを被貼付面に圧着する直線状の貼付縁部と、貼付縁部に対し、感圧転写式フィルムの相対移動方向上流位置で握持部に設けられ、フィルムの移動に従って裏地を自動的に剥離する裏地剥離手段と、貼付縁部に対し、感圧転写式フィルムの相対移動方向下流位置で握持部に設けられ、フィルムの先端部を固定的に保持するフィルム先端部保持手段と、貼付縁部に対して感圧転写式フィルムを直交方向へ相対移動可能とするように、被貼付面に対しフィルムを位置決めするフィルム位置決め手段とを具備したことを特徴とする貼付工具を提供する。

【0006】

好適な実施態様によれば、上記裏地剥離手段は、上記握持部との間に所定の空隙を介して固定配置され、かつ上記貼付縁部に平行に延設される棒状部材を具備する構成としてもよい。

また、上記フィルム先端部保持手段は、上記握持部に貫通形成された貫通孔内に移動可能に配置されるブロック体と、ブロック体に凹設され、感圧転写式フィルムの先端部を収容する収容凹部と、収容凹部の開口から離間して配置される上記握持部の上記貫通孔の内壁面とを具備する構成としてもよい。

さらに、上記フィルム位置決め手段は、上記ブロック体の上記収容凹部の後端に上記貼付縁部と平行に形成された直立内壁面を具備する構成としてもよい。

【0007】

【作用】

感圧転写式フィルムの先端部の裏地を予め剥がし、この先端部の支持体を、裏地剥離手段を

[Means to Solve the Problems]

Sticking edge of linear where in order to achieving theabove-mentioned objective, this invention, with sticking tool in order tostick pressure-sensitive transfer type film which has backing which protects transfered image film and the transfered image film which are supported in adhesive surface of carrier and carrier, in surface being bonded, is provided in edge of 握 holding section and the 握 holding section, transfered image film of pressure-sensitive transfer type film pressure bonding makes surface being bonded and, Vis-a-vis sticking edge, film end retaining means where with relative positioning direction upstream position of pressure-sensitive transfer type film it is provided in 握 holding section, followsto movement of film and with relative positioning direction downstream position of the pressure-sensitive transfer type film can provide backing in 握 holding section vis-a-vis the backing separation means and sticking edge which peel off in automatic, keeps the tip portion of film in fixable and, In order pressure-sensitive transfer type film to make relatively positionable to orthogonal direction vis-a-vis thesticking edge, film positioning means which registration does film vis-a-vis the surface being bonded was possessed offers sticking tool which is madefeature.

[0006]

According to preferred embodiment, above-mentioned backing separation means, through predetermined empty gap between above-mentioned 握 holding sections, is locked isarranged, is possible as constitution which possesses rod member which at same time is installed parallel on above-mentionedsticking edge.

In addition, above-mentioned film end retaining means, is installed in block, and block which inside hole which it was penetrated was formed toabove-mentioned 握 holding section are arranged in movable alienating from opening storage depression and storage depression which accommodate the tip portion of pressure-sensitive transfer type film, is possible as constitution which possesses inside wall surface of above-mentioned hole of above-mentioned 握 holding section which is arranged.

Furthermore, above-mentioned film positioning means is possible as constitutionwhich possesses upright inside wall surface which was formed parallel with theabove-mentioned sticking edge in rear end of above-mentioned storage depression of above-mentioned block.

[0007]

[Working Principle]

It peels beforehand, carrier of this tip portion, places backing of the tip portion of pressure-sensitive transfer type film, in

通して貼付縁部に載せ、さらにフィルム先端部保持手段によって固定的に保持する。

この状態で、被貼付面に貼付縁部を押し当て、支持体を被貼付面に貼付しつつ貼付工具を移動させる。

貼付縁部は、貼付工具の移動に伴い支持体上を摺動し、支持体が転写画像フィルムとともに、接着面の空気を排除されながら被貼付面に貼付される。

このとき、感圧転写式フィルムが貼付工具の移動に従って相対的に前進するので、裏地は裏地剥離手段の作用によって支持体から自動的に剥がされる。

さらに貼付工具を移動させると、支持体は、先端で貼付工具に固定されているので貼付工具と共に移動し、転写画像フィルムのみを被貼付面に残して剥離され、取り去られる。

この貼付工程において、感圧転写式フィルムは、フィルム位置決め手段によって貼付工具の貼付縁部に直交して配置され、被貼付面に対して貼付工具の移動方向へ平行に位置決めされる。

【0008】

【実施例】

以下、添付図面に示した好適な実施例に基づき、本発明をさらに詳細に説明する。

図面を参照すると、図 1 は、本発明の一実施例による貼付工具 10 を斜視図で示す。

貼付工具 10 は、柔軟性を有した樹脂成形品からなる薄板状の握持部 12 と、握持部 12 のテーパ状縁部 14 に固定され、比較的高硬度の材料からなる貼付部 16 とを備える。

貼付部 16 は先端に直線状の貼付縁部 18 を備える。

握持部 12 の上面側には、貼付部 16 に近接して、裏地剥離手段 20 が配置される。

裏地剥離手段 20 は、握持部 12 のテーパ状縁部 14 の上方位置で貼付部 16 に対して平行に延設される棒状部材 22 と、握持部 12 の上面に固定され、テーパ状縁部 14 との間に所定の空隙を介して棒状部材 22 を固定的に支持する支持台 24 とからなる。

また、握持部 12 は、テーパ状縁部 14 に近接して、厚さ方向へ貫通する矩形貫通孔 26 を備え、

sticking edge through backing separation means, in the fixable furthermore with film end retaining means keeps.

While with this state, pressing sticking edge to surface being bonded,sticking carrier in surface being bonded it moves sticking tool.

While sticking edge rubbing to do on carrier attendant uponmovement of sticking tool, carrier with transfered image film, beingremoved air of adhering surface, it is stuck to surface being bonded.

This time, pressure-sensitive transfer type film following to movement of sticking tool,because forward it does relatively, backing in action of backing separation means is peeled from carrier to automatic.

Furthermore when sticking tool is moved, because carrier islocked to sticking tool with end, with sticking tool it moves, leaves only transfered image film to surface being bonded and is exfoliated, isremoved.

In this sticking step, pressure-sensitive transfer type film is arranged, with film positioning means crossingin sticking edge of sticking tool, registration is doneparallel to movement direction of sticking tool vis-a-vis surface being bonded.

[0008]

[Working Example(s)]

this invention furthermore is explained in detail below, on basis of preferred Working Example which is shown in attached figure.

When drawing is referred to, Figure 1 with one Working Example of this invention shows sticking tool 10 with oblique view.

Sticking tool 10, 握 holding section is locked by taper edge 14 of 12 of thin sheet which consists of resin molding which possesses softening and 握 holding section, 12 relatively has tacky part 16 which consists of the material of high hardness.

tacky part 16 provides sticking edge 18 of linear for end.

proximity making tacky part 16, backing separation means 20 is arranged in top side of 握 holding section 12.

backing separation means 20, is locked by top of rod member 22 and 握 holdingsection 12 which are installed parallel vis-a-vis tacky part 16 with the upward position of taper edge 14 of 握 holding section, 12 through predetermined empty gap between taper edge 14 , consists of support platform 24 which supports rod member 22 in the fixable.

In addition, 握 holding section 12, proximity making taper edge 14, has rectangular hole 26 which it penetrates to

矩形貫通孔 26 内に、フィルム先端部保持手段 28 が移動可能に配置される。

【0009】

フィルム先端部保持手段 28 は、矩形貫通孔 26 内に上下方向へ摺動可能に配置される摺動ブロック 30 からなる。

摺動ブロック 30 は、下端部に感圧転写式フィルムの先端部を収容する収容凹部 32 を、前面から凹設して備える。

図 2 に断面で示すように、矩形貫通孔 26 は、テーパ状縁部 14 側に傾斜内壁面 34 を有し、それにより握持部 12 の上面側開口 26a よりも下面側開口 26b が拡張されている。

したがって、摺動ブロック 30 の前面は、矩形貫通孔 26 の下面側開口 26b において、傾斜内壁面 34 との間に隙間を介して配置される。

また、摺動ブロック 30 の収容凹部 32 は、貼付部 16 の貼付縁部 18 と平行に延びる直立内壁面 36 を後端に備える。

収容凹部 32 の直立内壁面 36 は、フィルム先端部を収容することによって貼付工程中のフィルムの位置決めをするフィルム位置決め手段として作用する。

なお、摺動ブロック 30 は、矩形貫通孔 26 との摺動面に溝や突起等からなる図示しない周知の係止手段及び案内手段を設けることによって、矩形貫通孔 26 からの脱落を防止され、かつ、上下方向への平行移動を補助されることが望ましい。

【0010】

上記構成を有した貼付工具 10 の作用を、図 2 を参照して以下に説明する。

まず図 2(a)に示すように、摺動ブロック 30 を、収容凹部 32 が矩形貫通孔 26 の下面側開口 26b よりも下側に露出する下方位置に配置する。

そして、感圧転写式フィルム F の裏地 B をフィルム先端部 E 近傍に設けたスリット S から剥がし、残りの裏地 B を有したフィルム先端部 E を棒状部材 22 と握持部 12 のテーパ状縁部 14 との空隙に通すとともに、剥がされた裏地 B を棒状部材 22 の上方に配置する。

フィルム先端部 E はさらに、貼付縁部 18 を巻込んで握持部 12 の下面側で摺動ブロック 30 の収容凹部 32 内に挿入される。

thickness direction, inside rectangular hole 26, the film end retaining means 28 is arranged in movable.

[0009]

film end retaining means 28 inside rectangular hole 26 consists of rubbing block 30 which is arranged in slidable to up/down direction.

rubbing block 30 has installing storage depression 32 which accommodates tip portion of the pressure-sensitive transfer type film in bottom end, from front surface.

As in Figure 2 shown with cross section, rectangular hole 26 has inclined inside wall surface 34 on taper edge 14 side, under side opening 26 b is expanded with that incomparison with top side opening 26 a of 握 holding section 12.

Therefore, as for front surface of rubbing block 30, through gap betweeninclined inside wall surface 34 , in under side opening 26 b of rectangular hole 26, it isarranged.

In addition, storage depression 32 of rubbing block 30 provides upright inside wall surface 36 whichextends parallel with sticking edge 18 of tacky part 16 for rear end.

Upright inside wall surface 36 of storage depression 32 operates as film positioning means which does the registration of film in sticking step film end is accommodatedwith .

Furthermore, rubbing block 30 provides unshown widely known locking means and the guide which consist of groove and protuberance etc in rubbing surface of the rectangular hole 26, flaking from rectangular hole 26 is prevented by , at sametime, parallel movement to up/down direction is assisted is desirable.

[0010]

Action of sticking tool 10 which possesses above-mentionedconstitution, referring to Figure 2, you explain below.

First as shown in Figure 2 (a), rubbing block 30, storage depression 32 is arranged in downward position which is exposed in underside in comparison with under side opening 26 b of rectangular hole 26.

As and, it peels from slit S which provides backing B of pressure-sensitive transfer type film F in film end Evicinity, it passes through film end E which possesses theremaining backing B to empty gap of rod member 22 and taper edge 14 of 握 holdingsection 12, backing B which is peeled is arranged in upward direction of the rod member 22.

film end E furthermore, involving sticking edge 18, with under side of 握 holding section 12 is inserted into storage depression 32 of rubbing block 30.

このとき、フィルム先端部 E の前縁を収容凹部 32 の直立内壁面 36 に確実に当接させることにより、フィルム F の伸長方向が貼付縁部 18 に対して直交配置される。

この状態で、摺動ブロック 30 を矩形貫通孔 26 内に押し込み、図 2(b)に示すように収容凹部 32 が矩形貫通孔 26 内に隠蔽される上方位置へ配置する。

これによってフィルム先端部 E は、摺動ブロック 30 の前面と矩形貫通孔 26 傾斜内壁面 34 との隙間に挟み込まれ、固定される。

同時に、摺動ブロック 30 の上端部は矩形貫通孔 26 の上面側開口 26a から上方へ突出してフィルム F を押し上げ、棒状部材 22 と協働してフィルム F に張力を付与する。

このようにして、感圧転写式フィルム F が貼付工具 10 に所定姿勢で固定され、作業準備が完了する。

【0011】

作業準備状態では、図 2(b)に示すように感圧転写式フィルム F の支持体 C が、転写画像フィルム I を支持して貼付工具 10 の貼付部 16 の貼付縁部 18 を巻込んで配置される。

この状態で、被貼付面に貼付縁部 18 を押し当て、支持体 C を貼付しつつ貼付工具 10 を移動させる。

貼付縁部 18 は、貼付工具 10 の移動に伴い支持体 C 上を摺動し、支持体 C が転写画像フィルム I とともに、接着面の空気を排除されながら被貼付面に貼付される。

このとき、感圧転写式フィルム F が貼付工具 10 の移動に従って相対的に前進するので、裏地 B は棒状部材 22 の作用によって支持体 C から自動的に剥がされる。

さらに貼付工具 10 を移動させると、支持体 C は、先端で貼付工具 10 に固定されているので貼付工具 10 と共に移動し、転写画像フィルム I を被貼付面に残して剥離され、取り去られる。

この貼付工程において、感圧転写式フィルム F は、前述のように摺動ブロック 30 の収容凹部 32 の直立内壁面 36 によって貼付工具 10 の貼付縁部 18 に直交して配置されるので、被貼付面に対して貼付工具 10 の移動方向へ平行に位置決めされる。

また、貼付作業中に貼付工具 10 の移動方向を調整することにより、被貼付面に対する感圧転写式フィルム F の位置、すなわち貼付方向を変

extension direction of film F it crosses is arranged leading edge of the film end E vis-a-vis sticking edge 18 this time, by contacting theupright inside wall surface 36 of storage depression 32 securely.

As with this state, rubbing block 30 inside rectangular hole 26 shown in pushing in and Figure 2 (b), it arranges to upward position where storage depression 32 hiding makesinside rectangular hole 26.

Now film end E is put between by gap of front surface and rectangular hole 26 inclined inside wall surface 34 of rubbing block 30, is locked.

Simultaneously, upper end of rubbing block 30 from top side opening 26 a of rectangular hole 26 protruding doing to upward direction, pushes up film F, the rod member 22 and cooperation working does and grants tension to film F.

This way, pressure-sensitive transfer type film F is locked by sticking tool 10 with specified posture,job preparation completes.

[0011]

With job prepared state, as shown in Figure 2 (b), carrier C of pressure-sensitive transfer type film F,supporting transfered image film I, involving sticking edge 18 of tacky part 16 of thesticking tool 10, it is arranged.

While with this state, pressing sticking edge 18 to surface being bonded,sticking carrier C it moves sticking tool 10.

While sticking edge 18 rubbing to do on carrier C attendant uponmovement of sticking tool 10, carrier C with transfered image film I, beingremoved air of adhering surface, it is stuck to surface being bonded.

This time, pressure-sensitive transfer type film F following to movement of sticking tool 10,because forward it does relatively, backing B in action of rod member 22 is peeled from carrier C to automatic.

Furthermore when sticking tool 10 is moved, because carrier C islocked to sticking tool 10 with end, with sticking tool 10 it moves, leaves transfered image film I to surface being bonded and is exfoliated, is removed.

In this sticking step, because pressure-sensitive transfer type film F is arranged, theaforementioned way with upright inside wall surface 36 of storage depression 32 of rubbing block 30 crossing in sticking edge 18 of sticking tool 10, registration it isdone parallel to movement direction of sticking tool 10 vis-a-vis surface being bonded.

In addition, position、 namely sticking direction of pressure-sensitive transfer type film F for the surface being bonded by adjusting movement direction of sticking tool 10 in

えることができるので、長尺のフィルムであっても容易に正確な位置に貼付することができる。

【0012】

【発明の効果】

以上の説明から明らかなように、本発明によれば、感圧転写式フィルムの貼付工程に要する作業時間が削減され、長尺のフィルムであっても確実かつ容易な位置決めが可能となり、作業効率が向上する。

【図面の簡単な説明】

【図1】

本発明の一実施例による貼付工具の斜視図である。

【図2】

図1の貼付工具の線II-IIに沿った断面図で、(a)フィルム挿入時、(b)貼付準備完了時、を示す。

【符号の説明】

12

握持部

16

貼付部

18

貼付縁部

20

裏地剥離手段

22

棒状部材

26

矩形貫通孔

28

フィルム先端部保持手段

30

摺動ブロック

32

収容凹部

34

傾斜内壁面

adhesion work, ischanged, because it is possible , even with long film it canstick easily in correct position.

[0012]

[Effects of the Invention]

As been clear from explanation above, according to this invention, the work time which is required in sticking step of pressure-sensitive transfer type film is reduced,certainty and easy registration become possible even with long film , the operating efficiency improves.

[Brief Explanation of the Drawing(s)]

[Figure 1]

It is a oblique view of sticking tool with one Working Example of this invention.

[Figure 2]

With sectional view which parallels to line II-II of sticking tool of Figure 1, at time of (a) film insertion, when completing the(b) sticking preparation, it shows.

[Explanation of Symbols in Drawings]

12

握 holding section

16

tacky part

18

Sticking edge

20

backing separation means

22

rod member

26

rectangular hole

28

film end retaining means

30

rubbing block

32

storage depression

34

Inclined inside wall surface

36

直立内壁面

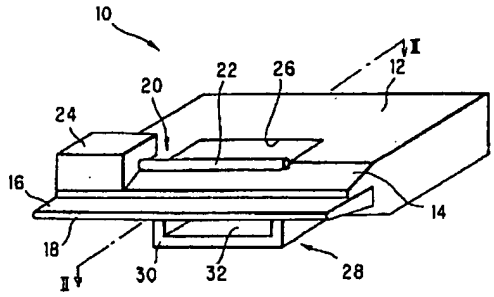
36

Upright inside wall surface

Drawings

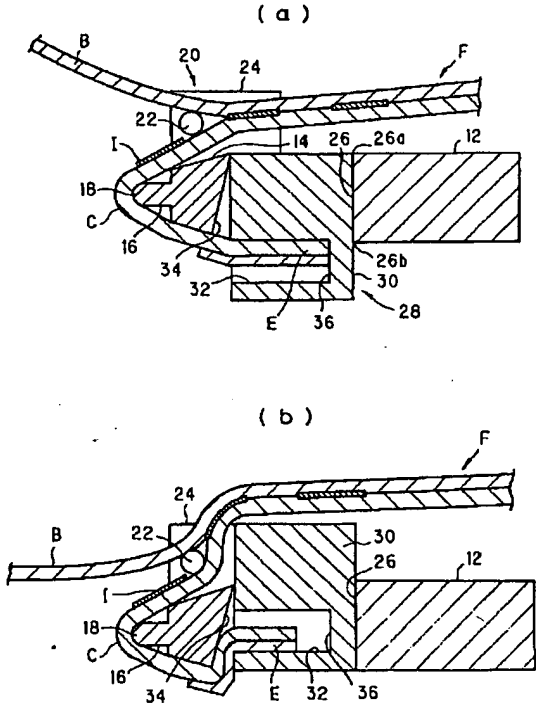
【図1】

[Figure 1]



【図2】

[Figure 2]



Translation of
JP 19940720 14 A

[NAME OF DOCUMENT] SPECIFICATION

[TITLE OF THE INVENTION]

Application Tool for Pressure Sensitive Transfer Film

[SCOPE OF CLAIM FOR PATENT]

[Claim 1] An application tool for applying a pressure sensitive transfer film onto a surface to be applied, the film comprising a carrier, a transfer-image film carried on an applying side of the carrier, and a backing covering the transfer-image film, comprising;

a gripped section, a linear applying edge section provided with an edge of said gripped section and press-fitting the transfer-image film of the pressure sensitive transfer film to the surface,

backing releasing means provided with said gripped section at an upstream of said applying edge section in a direction of movement of the pressure sensitive transfer film relative to said applying edge section and automatically releasing the backing in proportion to the movement of the film,

film-end holding means provided with said gripped section at a downstream of said applying edge section in a direction of movement of the pressure sensitive transfer film relative to said applying edge section and fixedly holding a leading end of the film, and

film positioning means positioning the pressure sensitive transfer film on the surface so as to enable the film to move relative to a direction perpendicular to said applying edge section.

[Claim 2] An application tool as claimed in claim 1, wherein said backing releasing means comprises a rod member fixedly arranged with a gap from said gripped section and extending parallel to said applying edge

pressure sensitive transfer film, then the film is positioned on the surface by measured with the eye or aligned with a guide line on the surface. Then, the applying edge of the squeegee is pressed onto the film and the surface from the rear side of the backing, and thus, there is air escaping between the applying side and the surface, and the transfer-image film is transferred by pressure to the surface. After that, only the carrier is manually peeled off from the surface. Because the adhesiveness of the applying side of the carrier is much smaller than that of the adhesive side of the transfer-image film, the transfer-image film remains on the surface to be applied.

[0003]

[Problems to be Solved by Invention]

The process of applying a pressure sensitive transfer film with a conventional application tool includes independent steps as described above, and therefore is time-consuming and has poor working efficiency. When window frame protective tape or other elongated tape is used, the film loses rigidity by peeling off the backing, therefore, the positioning of the film on the surface to be applied may be difficult.

[0004]

The object of the present invention is to solve the above problems and to provide an application tool for applying a pressure sensitive transfer film that can reduce working hours required for applying a pressure sensitive transfer film, precisely and easily position an elongated film, and thus improve working efficiency.

[0005]

[Means for Solving the Problems]

To accomplish the above object, the present invention provides an application tool for applying a pressure sensitive transfer film onto a surface to be

the block.

[0007]

[Mode of Operation]

The backing of the lead end of the pressure sensitive transfer film is previously peeled off, and the carrier of the lead end is disposed through the backing releasing means so as to be placed on the applying edge section, and is fixedly held by the film-end holding means. In this state, the applying edge section is pressed on the surface to be applied, and the application tool is moved along the surface, thereby the carrier is adhered to the surface. The applying edge section slides on the carrier following the movement of the application tool, thereby the carrier is adhered to the surface together with the transfer-image film, at the same time as that air escapes from the adhered interface thereof. At this time, the pressure sensitive transfer film advances according to the movement of the application tool, thereby, the backing is automatically released from the carrier by the backing releasing means. When the application tool is further moved, the carrier moves with the application tool because the lead end of the carrier is fixed to the application tool, and thus, leaves only the transfer-image film on the surface, and is peeled off and removed from the surface. In this application process, the pressure sensitive transfer film is arranged perpendicular to the applying edge section of the application tool and is positioned parallel to the moving direction of the application tool on the surface to be applied by the film positioning means.

[0008]

[Embodiments]

The present invention will be described in more detail based on a preferred embodiment shown in the attached drawings.

block 30 is arranged with a gap from the slanted inner wall 34 at the lower opening 26b of the rectangular through hole 26. The receiving depression 32 of the sliding block 30 has an vertical inner wall 36 extending parallel to the applying edge section 18 of the applying section 16. The vertical inner wall 36 of the receiving depression 32 acts as a film positioning means for positioning the film during the applying process by receiving the lead end of the film. Preferably, the sliding block 30 is prevented from falling from the rectangular through hole 26 and is assisted in the parallel movement from the upper side to the lower side by providing a sliding interface in the through hole 26 with a well-known stopper means and guiding means, such as grooves and projections (not shown).

[0010]

The operation of the application tool 10 having the aforesaid constitution will be described with reference to Fig. 2. First, as shown in Fig. 2(a), the sliding block 30 is placed at a lower position at which the receiving depression 32 is exposed below the lower opening 26b of the rectangular through hole 26. Then, the backing B of the pressure sensitive transfer film F is peeled off from a slit S formed in the vicinity of a film end E, the film end E with the remaining backing B is arranged through a gap between the rod member 22 and the tapered edge 14 of the gripped section 12, and the peeled backing B is placed on the upper side of the rod member 22. Furthermore, the film end E is wound around the applying edge section 18 and inserted to the receiving depression 32 of the sliding block 30 at the lower side of the gripped section 12. At this time, the lead edge of the film end E is brought into contact with a vertical inner wall 36 of the receiving depression 32, thereby the length of the film F is arranged

end of the carrier C is fixed on the tool 10, and thus is peeled off and removed so as to leave the transfer-image film I on the surface. In this application process, the pressure sensitive transfer film F is arranged perpendicular to the applying edge section 18 of the application tool 10 by the vertical inner wall 36 of the receiving depression 32 of the sliding block 30, and thus, is positioned parallel to the moving direction of the application tool 10 on the surface to be applied. Furthermore, during the application process, the position, i.e., the applying direction of the pressure sensitive transfer film F on the surface can be changed by adjusting the moving direction of the tool 10, thereby, an elongated film also can be easily adhered at a precise position.

[0012]

[Effect of Invention]

As clear from the above description, according to the present invention, working hours required for an applying process of the pressure sensitive transfer film is reduced, an elongated film can be precisely and easily positioned, and thus working efficiency is improved.

[BRIEF DESCRIPTION OF THE DRAWINGS]

[Figure 1]

A perspective view of an application tool according to one embodiment of the present invention.

[Figure 2]

Sectional views of the application tool along line II-II in Figure 1, under the condition that (a) the film is inserted therein, and (b) the preparation for application is completed.

[DESCRIPTION OF REFERENCE NUMERALS]

12: gripped section

16: applying section

18: applying edge section

[NAME OF DOCUMENT] ABSTRACT

[ABSTRACT]

[OBJECT] The object of the present invention is to provide an application tool for applying a pressure sensitive transfer film that can reduce working hours required for application process, precisely and easily position an elongated film, and thus improve working efficiency.

[CONSTRUCTION] An application tool 10 comprises a gripped section 12 of a thin plate, and an applying section 16 fixed to a tapered edge 14 of the gripped section 12. The applying section 16 has a linear applying edge section 18 at the end thereof. A rod member 22 is arranged at upper side of the gripped section 12 with a gap from the tapered edge 14 and extends parallel to the applying section 16. The gripped section 12 has a rectangular through hole 26 adjacent to the tapered edge 14 and formed through the thickness of the gripped section 12, and a sliding block 30 slidably arranged in the through hole 26. The sliding block 30 has a receiving depression 32 for receiving the lead end of the pressure sensitive transfer film that is recessed from the front side of the sliding block 30 at the lower end thereof. The receiving depression 32 has a vertical inner wall extending parallel to the applying edge section 18 of the applying section 16 at the back side thereof.

[SELECTED DRAWING] Figure 1

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